

Sheet 1

PTC/SSI/09a (08-03)
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

of 13

Complete if Known				
Application Number	10/700,971			
Filing Date	November 4, 2003			
First Named Inventor	Muthiah Manoharan			
Art Unit	1623			
Examiner Name	To Be Determined			
Attorney Docket Number CHEM0005US.P1 (ISIC0009-10)				

	U.S. PATENT DOCUMENTS						
Fyaminer	Cite	Document Number	Publication/Issue Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant		
Initials *	No.1	Number - Kind Code ² (if known)	MM-DD-YYYY	Cited Document	Passages or Relevant Figures Appear		
	AA	US-5,898,031	04-27-1999	Crooke			
	AB	US-6,107,094	08-22-2000	Crooke			
	AC	US-6,395,492	05-28-2002	Manoharan			
	AD	US-4,958,013	09-18-1990	Letsinger			
	AE	US-6,528,631	03-04-2003	Manoharan			
	AF	US-4,904,582	02-27-1990	Tullis			
	AG	US-5,672,662	09-30-1997	Harris			
	AH	US-5,714,166	02-03-1998	Tomalia			
	AI	US-6,559,279	05-06-2003	Manoharan			
	AJ	US-6,344,436	02-05-2002	Smith			
	AK	US-6,525,031	02-25-2003	Manoharan			
	AL	US-6,365,379	04-02-2002	Lima			
	AM	US-5,272,250	12-21-1993	Spielvogel			
	AN	US-4,948,882	08-14-1990	Ruth			
	AO	US-5,525,465	06-11-1996	Haralambidis			
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	AQ	US-5,545,730	08-13-1996	Urdea			
	AR	US-5,552,538	09-03-1996	Urdea			
	AS	US-5,580,731	12-03-1996	Chang			
	AT	US-5,486,603	01-23-1996	Buhr			

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Examiner	miner Cite	Foreign Patent Document	Publication	Name of Patentee or	Pages, Columns, Lines, Where Relevant		
Initials*	No.1	Country Code ³ - Number ⁴ - Kind Code ⁵ (# known)	Dete/Filing Date MM-DD-YYYY	Applicant of Cited Document	Passages or Relevant Figures Appear	T ⁶	
	AU	✓ WO 01/48183	07-05-2001	Devgen NV			
	AV	/ WO 00/44895	08-03-2000	Kreutzer			
	AW	✓ WO 00/49035	08-24-2000	General Hospital			
	AX	√ WO 00/63364	10-26-2000	American Home Products Corp.			
	AY	✓ WO 01/36641	05-25-2001	Chiron Corp.			
	AZ	J WO 01/36646	05-25-2001	Cancer Research			
	BA	√ WO 99/32619	07-01-1999	Carnegie Inst. Of Washington			
	ВВ	√WO 00/44914	08-03-2000	Med. College of Georgia			
	BC	J WO 01/29058	04-26-2001	Univ. of Mass.			

Examiner	Date
Signature	Considered

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This collection of information is required by 37 CRF I 97 and 1.98. The information is required to obtain or retain a broneft by the public which is to life (and by the USFTO to process) an application. Confidentially is governed by 58 U.S.C. 122 and 37 CRF I 1.14. This collection is estimated to take 2 host compilete, including gathering, preparing, and submitting the completed application form to the USFTO. Then will vary depending upon the individual case, Any comments on the amount of time you require to compilete this form and/or suggestions for reducing this burden, should be sent to the Chef Information Office, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, V. 22313-1450, DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS, SEND TO: Commissioner for Petents, P.O. and V.150, Alexandria, V. 22313-1450, DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS, SEND TO: Commissioner for Petents, P.O. and V.150, Alexandria, V. 22313-1450, DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS, SEND TO: Commissioner for Petents, P.O. and V.150, Alexandria, V. 22313-1450, DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS, SEND TO: Commissioner for Petents, P.O. and V.150, Alexandria, V. 22313-1450, DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS, SEND TO: Commissioner for Petents, P.O. and V.150, Alexandria, V. 22313-1450, DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS.

PTO/SB/MB6 (08-03)
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Substitut	e for form 1449A/PTO		Complete if Known		
			Application Number	10/700,971	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT		Filing Date	November 4, 2003		
		First Named Inventor	Muthiah Manoharan		
			Art Unit	1623	
(Use as many sheets as necessary)		Examiner Name	To Be Determined		
Sheet	2 of	13	Attorney Docket Number	CHEM0005US.P1 (ISIC0009-101)	

	U.S. PATENT DOCUMENTS						
Examiner	Cite	Document Number	Publication/Issue Date	Name of Patentee or Applicant of Cited Document	Peges, Columns, Lines, Where Rolevant		
Initials *	No.1	Number - Kind Code ² (if known)		Cited Document	Passages or Relevant Figures Appear		
	BD	US-5,608,046	03-04-1997	Cook			
	BE	US-4,587,044	05-06-1986	Miller			
	BF	US-4,667,025	05-19-1987	Miyoshi			
	BG	US-5,254,469	10-19-1993	Warren			
	BH	US-5,245,022	09-14-1993	Weis			
	BI	US-5,112,963	05-12-1992	Pieles			
	BJ	US-5,391,723	02-21-1995	Priest			
	BK	US-5,510,475	04-23-1996	Agrawal			
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	BM	US-5,574,142	11-12-1996	Meyer			
	BN	US-5,684,142	11-04-1997	Mishra			
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	BQ	US-6,335,432	01-01-2002	Segev			
	BR	US-6,335,437	01-01-2002	Manoharan			
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	BT	US-5,218,105	06-08-1993	Cook			
	BU	US-5,578,717	11-26-1996	Urdea			
	BV	US-5,591,584	01-07-1997	Chang			
	BW	US-5,109,124	04-28-1992	Ramachandran			

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Examiner Cite	Cite	Foreign Patent Document	Publication	Name of Patentee or	Pages, Columns, Lines, Where Relevant		
Initials*	No.1	Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)	Date/Filing Date MM-DD-YYYY	Applicant of Cited Document	Passages or Relevant Figures Appear	T°	
	BX	/ WO 01/75164	10-11-2001	Whitehead Inst.			
	BY	WO 93/07883	04-29-1993	Isis Pharm.			
	BZ	✓ WO 00/76554	12-21-2000	Isis Pharm.			
	CA	✓ WO 96/11205	04-18-1996	Isis Pharm.			
CB WO 98/52614		11-26-1998	Brd. Of Trustees of the Leland Stanford Junior Univ.				

Examiner Signature		Date Considered	-	

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Substitute for form 1449A/PTO				Complete if Known		
				Application Number	10/700,971	
INF	ORMATION	DIS	CLOSURE	Filing Date	November 4, 2003	
STA	TEMENT B	Y A	PPLICANT	First Named Inventor	Muthiah Manoharan	
				Art Unit	1623	
	(Use as many she	eets as	necessary)	Examiner Name	To Be Determined	
Sheet	3	of	13	Attorney Docket Number	CHEM0005US.P1 (ISIC0009-101)	

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Examiner	Cite	Document Number	Publication/Issue Data	Name of Patentee or Applicant of	Pages, Columns, Lines, Where Relevant			
Initials No.1	Number - Kind Code ² (if known)	MM-DD-YYYY	Cited Document	Passages or Relevant Figures Appear				
	CC	US-5,118,802	06-02-1992	Smith				
	CD	US-5,138,045	08-11-1992	Cook				
	CE	US-5,414,077	05-09-1995	Lin				
	CF	US-5,512,439	04-30-1996	Hornes				
	CC	US-5,578,718	11-26-1996	Cook				
	CH	US-4,605,735	08-12-1986	Miyoshi				
	CI	US-4,762,779	08-09-1988	Snitman				
	CJ	US-4,789,737	12-06-1988	Miyoshi				
	CK	US-4,824,941	04-25-1989	Gordon				
	CL	US-4,835,263	05-30-1989	Nguyen				
	CM	US-4,876,335	10-24-1989	Yamane				
	CN	US-5,082,830	01-21-1992	Brakel				
	СО	US-5,214,136	05-25-1993	Lin				
	CP	US-5,149,782	09-22-1992	Chang				
	CQ	US-5,258,506	11-02-1993	Urdea				
	CR	US-5,262,536	11-16-1993	Hobbs				
	CS	US-5,292,873	03-08-1994	Rokita				
	CT	US-5,317,098	05-31-1994	Shizuya				
	CU	US-5,371,241	12-06-1994	Brush				
	CV	US-5,416,203	05-16-1995	Letsinger	•			

	FOREIGN PATENT DOCUMENTS					
Examiner	Cite	Foreign Patent Document	Publication	Name of Patentee or	Pages, Columns, Lines, Where Relevant	
Initials*	No.'	Country Code ³ - Number ⁴ - Kind Code ⁵ (# known)	Dete/Filing Dete MM-DD-YYYY	Applicant of Cited Document	Passages or Relevant Figures Appear	T ⁶
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U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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Substitute	o for form 1449A/PTC)		Complete if Known				
				Application Number	10/700,971			
			CLOSURE	Filing Date	November 4, 2003			
STA"	TEMENT B	YΑ	PPLICANT	First Named Inventor	Muthiah Manoharan			
				Art Unit	1623			
	(Use as many she	eets as	necessary)	Examiner Name	To Be Determined			
Sheet	4	of	13	Attorney Docket Number	CHEM0005US.P1 (ISIC0009-101)			

			U.S. PATENT D	OCUMENTS	
Examiner Initials *	Cite	Document Number	Publication/Issue Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant
	No.1	Number - Kind Code ² (if known)	MM-DD-YYYY	Cited Document	Passages or Relevant Figures Appear
	CW	US-5,451,463	09-19-1995	Nelson	
	CX	US-5,514,785	05-07-1996	Van Ness	
	CY	US-5,565,552	10-15-1996	Magda	
	CZ	US-5,567,810	10-22-1996	Weis	
	DA	US-5,585,481	12-17-1996	Arnold	
	DB	US-5,587,371	12-24-1996	Sessler	
	DC	US-5,595,726	01-21-1997	Magda	
	DD	US-5,597,696	01-28-1997	Linn	
	DE	US-5,599,923	02-04-1997	Sessler	
	DF	US-5,599,928	02-04-1997	Hemmi	
	DG	US-5,688,941	11-18-1997	Cook	
	DH	US-6,153,737	11-28-2000	Manoharan	
	DI	US-6,172,208	01-09-2001	Cook	
	DJ	US-6,300,319	10-09-2001	Manoharan	
	DK	US-6,335,434	01-01-2002	Guzaev	
	DL	US-6,395,437	05-28-2002	Wollesen	
	DM	US-6,444,806	09-03-2002	Veerapaneni	
	DN	US-6,486,308	11-26-2002	Kutyavin	

FOREIGN PATENT DOCUMENTS											
	Cite	Foreign Patent Document	Publication	Name of Patentee or	Pages, Columns, Lines, Where Relevant						
	No.1	Country Code ⁸ - Number ⁴ - Kind Code ⁸ (if known)	Date/Filing Date MM-DD-YYYY	Applicant of Cited Document	Passages or Relevant Figures Appear	T⁰					
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Examiner Signature		Date Considered	
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Substitute	for form 1449B/PTC)		Complete if Known					
11150	D	-	OL COURT	Application Number	10/700,971				
			CLOSURE	Filing Date	November 4, 2003				
STAT	EMENT B	YΑ	PPLICANT	First Named Inventor	Muthiah Manoharan				
				Art Unit	1623				
	(Use as many she	ets as	necessary)	Examiner Name	To Be Determined				
Sheet	5	of	13	Attorney Docket Number	CHEM0005US.P1 (ISIC0009-101)				

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
	DO	AFONINA, L et al., "Sequence-specific arrest of primer extension on single-stranded DNA by an oligonucleotide-minor groove binder conjugate," Proc. Natl. Acad. Sci. USA (1996) 93:3199-3204.	
	DP	ANTOPOLSKY, M. et al., "Peptide-Oligonucleotide Phosphorothioate Conjugates with Membrane Translocation and Nuclear Localization Properties," Bioconjugate Chem. (1999) 10(4):598-606.	
	DQ	ARAR, K. et al., "Synthesis and Antiviral Activity of Peptide-Oligonucleotide Conjugates Prepared by Using Na-(Bromoaceytl)peptides," Bioconjugate Chem. (1995) 6(5):573-577.	
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	DS	ASTRIAB-FISHER, A. et al., "Antisense Inhibition of P-glycoprotein Expression Using Peptide- Oligonucleotide Conjugates," <i>Biochem. Pharmacol.</i> (2000) 60:83-90.	
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	DX	BONORA, G. M. et al., "Antisense activity of an anti-HIV oligonucleotide conjugated to linear and branched high molecular weight polyethylene glycols," Farmaco (1998) 53:634-637.	
	DY	BOUTLA, A. et al., "Short 5'-phosphorylated double-stranded RNAs induce RNA interference in Drosphila," Curr. Biol. (2001) 11:1776-1780.	

Examiner Signature	Date Considered	
*EXAMINER: Initial if reference considered	whether or not citation is in conformance with MPEP 6	609. Draw line through citation if not in conformance

and not considered. Include copy of this form with next communication to applicant.

Applicants unique citation designation number optionally. Applicants is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to Odation or retain a benefit by the public which is to file (and by the USPTO) processing anapplication. Confidentiality is operaned by 35 U.S. 1.22 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application from to the USPTO. Time will vary depending upon the individual to complete in the individual or the charge of the recovery of the recovery of the complete instruction and/or suppretents of recluding in the recovery of the charge of the complete instruction and/or suppretents of recluding in the complete instruction of the succession of the charge of the charge

PTO/SB/08b(08-03) Approved for use through 07/31/2006. OMB 0651-0031 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number Substitute for form 1449B/PTO Complete if Known Application Number 10/700.971 INFORMATION DISCLOSURE November 4, 2003 Filing Date STATEMENT BY APPLICANT First Named Inventor Muthiah Manoharan Art I Init 1623 (Use as many sheets as necessary) Examiner Name To Be Determined Attorney Docket Number CHEM0005US.P1 (ISIC0009-101) Sheet

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, dvi) and/or country where published.	T ²
	DZ	BRANDEN, L. J. et al., "A peptide nucleic acid-nuclear localization signal fusion that mediates nuclear transport of DNA," Nature Biotech (1999) 17:784-787.	
	EA	BRANTL, S., "Antisense-RNA regulation and RNA interference," Biochimica et Biophysica Acta (2001) 1575:15-25.	
	EB	CAZALLA, D. et al., "Nuclear Export and Retention Signals in the RS Domain of SR Proteins," Mol. Cell. Biol. (2002) 22(19):6871-6882.	
	EC	CHALOIN, L. et al., "Design of Carrier Peptide-Oligonucleotide Conjugates with Rapid Membrane Translocation and Nuclear Localization Properties," <i>Biochem. Biophys. Res. Commun.</i> (1998) 243:601- 608.	
	ED	CHIANG, MY. et al., "Antisense Oligonucleotides Inhibit Intercellular Adhesion Molecule I Expression by Two Distinct Mechanisms," J. Biol. Chem. (1991) 266(27):18162-18171.	
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	EF	COGONI, C. et al., "Post-transcriptional gene silencing across kingdoms," Genes Dev. (2000) 10:638-643.	
	EG	COHEN, G. L. et al., "Sequence Dependent Binding of cis-Dichlorodiammineplatinum(II) to DNA," J. Am. Chem. Soc. (1980) 102(7):2487-2488.	
	EH	COREY, D. R., "48000-fold Acceleration of Hybridization by Chemically Modified Oligonucleotides," J. Am. Chem. Soc. (1995) 117(36):9373-9374.	
-	EI	COREY, D. R. et al., "Generation of a Hybrid Sequence-Specific Single-Stranded Deoxyribonuclease," Science (1987) 238:1401-1403.	
	EJ	COREY, D. R. et al., "Sequence-Selective Hydrolysis of Duplex DNA by an Oligonucleotide- Directed Nuclease," J. Am. Chem. Soc. (1989) 111(22):8523-8525.	

Examiner Signature	 Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609, Draw line through citation if not in conformance

and not considered. Include copy of this form with next communication to applicant.

'Applicant's unique chain designation number (optional). "Applicant is to please a check mark here it English language Translation is attached.

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Examiner

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Substitute for form 1449B/PTO	Complete if Known				
INFORMATION DICOLOGUE	Application Number	10/700,971			
INFORMATION DISCLOSURE	Filing Date	November 4, 2003			
STATEMENT BY APPLICANT	First Named Inventor	Muthiah Manoharan			
	Art Unit	1623			
(Use as many sheets as necessary)	Examiner Name	To Be Determined			
Sheet 7 of 13	Attomey Docket Number	CHEM0005US.P1 (ISIC0009-101)			

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, diy and/or country where published.	T²
	EK	DUFF, R. J. et al., "[17] Intrabody Tissue-Specific Delivery of Antisense Conjugates in Animals: Ligand-Linker-Antisense Oligomer Conjugates," Methods Earzymol. (2000) 313:297-321.	
	EL	EFIMOV, V. A. et al., "Synthesis of Polyethylene Glycol – Oligonucleotide Conjugates," Bioorg. Khim. (1993) 19(8):800-804.	
	EM	ELBASHIR, S. M. et al., "RNA interference is mediated by 21- and 22-nucleotide RNAs," Genes Dev. (2001) 15:188-200.	
	EN	ELBASHIR, S. M. et al., "Duplexes of 21-nucleotide RNAs mediate RNA interference in cultured mammalian cells," Nature (2001) 411:494-498.	
	EO	ELBASHIR, S. M. et al., "Functional anatomy of siRNAs for mediating efficient RNAi in <i>Drosophila</i> melanogaster embryo lysate," EMBO J. (2001) 20(23):6877-6888.	
	EP	FIRE, A. et al., "Potent and specific genetic interference by double-stranded RNA in Caenorhabditis elegans," Nature (1998) 391:806-811.	
	EQ	FIRESTONE, R. A., "Low-Density Lipoprotein as a Vehicle for Targeting Antitumor Compounds to Cancer Cells," Bioconjugate Chem. (1994) 5:105-113.	
	ER	GORLACH, M. et al., "The mRNA Poly(A)-Binding Protein: Localization, Abundance, and RNA- Binding Specificity," Exp. Cells Res. (1994) 211:400-407.	
	ES	GUO, S. et al., "par-1, a Gene Required for Establishing Polarity in C. elegans Embryos, Encodes a Putative Ser/Thr Kinase That Is Asymmetrically Distributed," Cell (1995) 81:611-620.	
	ET	GURA, T., "A silence that speaks volumes," Nature (2000) 404:804-808.	
	EU	GUZAEV, A. et al., "Conjugation of Oligonucleotides Via an Electrophilic Tether: N-Chloroacetamidohexyl Phosphoramidite Reagent," Bioorg. Med. Chem. Lett. (1998) 8:3671-3676.	

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INITO	DIAATIO	N DIC	CLOSURE	Application Number	10/700,971	
				Filing Date	November 4, 2003	
SIAI	EMENI	BYA	PPLICANT	First Named Inventor	Muthiah Manoharan	
				Art Unit	1623	
	(Use as many	sheets as	necessary)	Examiner Name	To Be Determined	
Sheet	8	of	13	Attorney Docket Number	CHEM0005US.P1 (ISIC0009-101)	

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	EV	HALL, J. et al., "Efficient sequence-specific cleavage of RNA using novel europium complexes conjugated to oligonucleotides," Chem. Biol. (1994) 1(3):185-190.	
	EW	HARITON-GAZAL, E. et al., "Targeting of Nonkaryophilic Cell-Permeable Peptides into the Nuclei of Intact Cells by Covalently Attached Nuclear Localization Signals," <i>Biochemistry</i> (2002) 41(29):9208-9214.	
	EX	HENDERSON, B. R. et al., "A Comparison of the Activity, Sequence Specificity, and CRM1- Dependence of Different Nuclear Export Signals," Exp. Cell Res. (2000) 256-213-224.	
	EY	HUANG, L. et al., "Oligonucleotide conjugates of Eu(III) tetraazamacrocycles with pendent alcohol and amide groups promote sequence-specific RNA cleavage," J. Biol. Inorg. Chem. (2000) 5:85-92.	
	EZ	HUH, N. et al., "Design, Synthesis, and Evaluation of Mitomycin-Tethered Phosphorothioate Oligodeoxynucleotides," <i>Bioconjugate Chem.</i> (1996) 7:659-669.	
	FA	JASCHKE, A. et al., "Synthesis and properties of oligodeoxynbonucleotide-polyethylene glycol conjugates," Nucleic Acids Res. (1994) 22(22):4810-4817.	
	FB	JORGENSEN, R. A. et al., "Chalcone synthase cosuppression phenotypes in petunia flowers: comparison of sense vs. antisense constructs and single-copy vs. complex T-DNA sequences," Plant Mad. Biol. (1996) 31.957-973.	
	FC	JUBY, C. D. et al., "Facile Preparation of 3'Oligonucleotide-Peptide Conjugates," Tetrahedron Letters (1991) 32(7):879-882.	
	FD	KABANOV, A. V. et al., "A new class of antivirals: antisense oligonucleotides combined with a hydrophobic substituent effectively inhibit influenza virus reproduction and synthesis of virus- specific proteins in MDCx Ceslis, "FEB Lett. (1990) 259(2):27-330.	
	FE	KRIEG, A. M. et al., "Uptake of Oligodeoxyribonucleotides by Lymphoid Cells Is Heterogeneous and Inducible," Antisense Research and Development (1991) 1:161-171.	
	FF	KUIJPERS, W. H. A. et al., "Specific Recognition of Antibody-Oligonucleotide Conjugates by Radiolabeled Antisense Nucleotides: A Novel Approach for Two-Step Radioimmunotherapy of Cancer," Biomingsate Chem. 1993) 4(1):94-102.	

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	Art Unit	1623		
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Sheet 9 of 13	Attorney Docket Number	CHEM0005US.P1 (ISIC0009-101)		

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	FG	LETSINGER, R. L. et al., "Cholesteryl-conjugated oligonucleotides: Synthesis, properties, and activity as inhibitors of replication of human immunodeficiency virus in cell culture," <i>Proc. Natl. Acad. Sci.</i> USA (1989) 866533-6656.	
	FH	LI, S. et al., "Folate-Mediated Targeting of Antisense Oligodeoxynucleotides to Ovarian Cancer Cells," Pharm. Res. (1998) 15(10):1540-1545.	
	Fl	LIMA, W. F. et al., "Highly efficient endonucleolytic cleavage of RNA by a Cys:His: zinc-finger peptide," Proc. Natl. Acad. Sci. USA (1999) 96:10010-10015.	
	FJ	LIN, M. et al., "Inhibition of collagenase type I expression by psoralen antisense oligonucleotides id dermal fibroblasts," Faseb J. (1995) 9:1371-1377.	
	FK	LIN, KY. et al., "A Cytosine Analogue Capable of Clamp-Like Binding to a Guanine in Helical Nucleic Acids," J. Am. Chem. Soc. (1998) 120(33):8531-8532.	
	FL	LIPARDI, C. et al., "RNAi as Random Degradative PCR: siRNA Primers Convert mRNA into dsRNAs that Are Degraded to Generate New siRNAs," Cell (2001) 107:297-307.	
	FM	LIU, K. et al., "Efficient Nuclear Delivery of Antisense Oligodeoxynucleotides and Selective Inhibition of CEIT Expression by Apo E Peptide in a Human CETP-Stably Transfected CHO Cell Line," *Arterioseter. Thromb. Vasc. Biol. (1999) 19:2207-2213.	
	FN	LIXIN, R. et al., "Novel Properties of the Nucleolar Targeting Signal of Human Angiogenin," Biochem. Biophys. Res. Comm. (2001) 284:185-193.	
	FO	LUKHTANOV, E. A. et al., "Direct, Solid Phase Assembly of Dihydropyrroloindole Peptides with Conjugated Oligonucleotides," <i>Bioconjugate Chem.</i> (1996) 7(5):564-567.	
	FP	MANOHARAN, M., "Oligonucleotide Conjugates in Antisense Technology," Antisense Drug Technology, Principles, Strategies, and Applications, Crooke, S. T. ed., Marcel Dekker, New York, (2001) Chapter 16, 391-467.	
	FQ	MANOHARAN, M. et al., "Novel Functionalization of the Sugar Moiety of Nucleic Acids for Multiple Labeling in the Minor Groove," Tetrahedron Letters (1991) 32(49):7171-7174.	

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INICOD	MATION	COLOCUEE	Application Number	10/700,971	
		SCLOSURE	Filing Date	November 4, 2003	
STATE	MENT BY	APPLICANT	First Named Inventor	Muthiah Manoharan	
			Art Unit	1623	
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Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	FR	MANOHARAN, M., "Oligonucleotide Conjugates as Potential Antisense Drugs with Improved Uptake, Biodistribution, Targeted Delivery and Mechanism of Action," Antisense & Nucleic Acid Drug Development (2002) 12:103-128.	
	FS	MANOHARAN, M., "Designer Antisense Oligonucleotides: Conjugation Chemistry and Functionality Placement," Antisense Research and Applications, Crooke and Lebleu, eds., CRC Press Boca Raton, Ft. (1993) Chapter 17, 303-349.	
	FT	MANOHARAN, M. et al., "Lipidic Nucleic Acids," Tetrahedron Lett. (1995) 36(21):3651-3654.	
	FU	MARTINEZ, J. et al., "Single-Stranded Antisense siRNAs Guide Target RNA Cleavage in RNAi," Cell (2002) 110:563-574.	
	FV	MARUENDA, H. et al., "Antisense Sequence-Directed Cross-Linking of DNA Oligonucleotides by Mitomycin C," Bioconjugate Chem. (1996) 7(5):541-544.	
	FW	MARUENDA, H. et al., "Antisense sequence-directed cross-linking of RNA oligonucleotides by mitomycin," Anti-Cancer Drug. Des. (1997) 12:473-479.	
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	GA	MISHRA, R. K. et al., "Improved leishmanicidal effect of phosphorotioate antisense oligonucleotides by LDL-mediated delivery," <i>Biochim. Biophys Acta.</i> (1995) 1264:229-237.	
	GB	MONTGOMERY, M. K. et al., "RNA as a target of double-stranded RNA-mediated genetic interference in Caenorhabditis elegans," Proc. Natl. Acad. Sci. USA (1998) 95:15502-15507.	

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INITO	DIVATION	DIC	CLOSURE	Application Number	10/700,971	
				Filing Date	November 4, 2003	
STAT	EMENT B	ΥA	PPLICANT	First Named Inventor	Muthiah Manoharan	
				Art Unit	1623	
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	GC	NAPOLI, C. et al., "Introduction of a Chimeric Chalcone Synthase Gene into Petunia Results in Reversible Co-Suppression of Homologous Genes in trans," Plant Cell (1990) 2:279-289.	
	GD	NELSON, P. S. et al., "Bifunctional oligonucleotide probes synthesized using a novel CPG support are able to detect single base pair mutations," Nucleic Acids Res. (1989) 17(18):7187-7194.	
	GE	NISHIKURA, K. et al., "A Short Primer on RNAi: RNA-Directed RNA Polymerase Acts as a Key Catalyst," Cell (2001) 107:415-418.	
	GF	OBERHAUSER, B. et al., "Effective incorporation of 2"-O-methyl-oligoribonucleotides into liposomes and enhanced cell association through modification with thiocholesterol," Nucleic Acids. Res. (1992) 20(3):533-538.	
	GG	PARRISH, S. et al., "Functional Anatomy of a dsRNA Trigger: Differential Requirement for the Two Trigger Strands in RNA Interference," Molecular Cell (2000) 6:1077-1087.	
	GH	PICHON, C. et al., "Intracellular Routing and Inhibitory Activity of Oligonucleopeptides Containing a KDEL Motif," Mol. Pharmacol. (1997) 51:431-438.	
	GI	PRAKASH, T. P. et al., "Synthesis of Site-Specific Oligonucleotide-Polyamine Conjugates," Bioorg. Med. Chem. Lett. (1994) 4(14):1733-1738.	
	GJ	RAJUR, S. B. et al., "Covalent Protein-Oligonucleotide Conjugates for Efficient Delivery of Antisense Molecules," <i>Bioconjugate Chem.</i> (1997) 8(6):935-940.	
	GK	RHODES, J. et al., "Therapeutic potentiation of the immune system by costimulatory Schiff-base-forming drugs," <i>Nature</i> (1995) 377(6544):71-75.	
	GL	RUMP, E. T. et al., "Preparation of Conjugates of Oligodeoxynucleotides and Lipid Structures and Their Interaction with Low-Density Lipoprotein," <i>Bioconjugate Chem.</i> (1998) 9(3):341-349.	
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	STATEMENT BY APPLICANT				First Named Inventor	Muthiah Manoharan	
					Art Unit	1623	
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	GN	SCHWARZ, D. S. et al., "Evidence that siRNAs Function as Guides, Not Primers, in the Drosophila and Human RNAi Pathways," Molecular Cell (2002) 10:537-548.				
	GO	SHEA, R. G. et al., "Synthesis, hybridization properties and antiviral activity of lipid- oligodeoxynucleotide conjugates," <i>Nucleic Acids Res.</i> (1990) 18(13):3777-3783.				
	GP	SIJEN, T. et al., "On the Role of RNA Amplification in dsRNA-Triggered Gene Silencing." Cell (2001) 107:465-476.				
	GQ	SVINARCHUK, F. P. et al., "Inhibition of HIV proliferation in MT-4 cells by antisense oligonucleotide conjugated to lipophilic groups," <i>Biochimie</i> (1993) 75:49-54.				
	GR	TABARA, H. et al., "RNAi in C. elegans: Soaking in the Genome Sequence," Science (1998) 282:430-431.				
	GS	TAMANINI, F. et al., "The fragile X-related proteins FXR1P and FXR2P contain a functional nucleolar-targeting signal equivalent to the HIV-1 regulatory proteins," Hum. Mol. Genet. (2000) 9(10):1487-1493				
	GT	TIJSTERMAN, M. et al., "RNA Helicase MUT-14-Dependent Gene Silencing Triggered in C. elegans by Short Antisense RNAs," Science (2002) 295:694-697.				
	GU	TIMMONS, L. et al., "Specific interference by ingested dsRNA," Nature (1998) 395:854.				
	GV	TIMMONS, L. et al., "Ingestion of bacterially expressed dsRNAs can produce specific and potent genetic interference in Caenorhabditis elegans," Gene (2001) 263:103-112.				
	GW	TUSCHI., T. et al., "Targeted mRNA degradation by double-stranded RNA in vitro," Genes Dev. (1999) 13:3191-3197.				
	GX	WADA, A. et al., "Nuclear export of actin: a novel mechanism regulating the subcellular localization of a major cytoskeletal protein," EMBO J. (1998) 17:1635-1641.				

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	GY	WANG, X. et al., "Modular Recognition of RNA by a Human Pumilio-Homology Domain," Cell (2002) 110:501-512.	
	GZ	WEI, Z. et al., "Hybridization properties of oligodeoxynucleotide pairs bridged by polyarginine peptides," Nucleic Acids Res. (1996) 24(4):655-661.	
	НА	WEIN, G. et al., "The 3'-UTR of the mRNA coding for the major protein kinase C substrate MARCKS contains a novel CU-rich element interacting with the mRNA stabilizing factors HuD and HuR," Eur. Biochem. (2003) 270:359-365.	
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Examiner Signature	/Sean Mcgarry/	Date Considered	05/27/2008	
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[&]quot;EXAMINER: Initial if reference considered, whether or not clation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered, include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is no place a check mark here if English language Translation is attached.

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